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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,124

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Chiao-Chung Huang

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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP
600 GALLERIA PARKWAY, S.E.
STE 1500
ATLANTA, GA 30339-5994

EXAMINER

LEE, LAURA MICHELLE

ART UNIT

PAPER NUMBER

3724

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/667,124	Applicant(s) HUANG ET AL.	
	Examiner LAURA M. LEE	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/25/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/25/2008 have been fully considered but they are not persuasive. The applicant argues that the teachings of Borisov do not lend themselves to modifying the V-block (2) and carrying stops (4) such that it is the V-block that moves and the carrying stops (4) that are stationary. However, as all applicant is claiming is a four point bending test, it would be obvious to switch the moving and stationary parts that form the four points of pressure. The Borisov set up would still function in the reverse set-up. The recitation of the test piece having a slit, does not impart any structure to the test piece, only that the apparatus be capable of splitting a test piece with such a structure.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raizk et al (U.S. Patent 3,157,235), herein referred to as Raizk in view of Borisov et al. (SU 197708), herein referred to as Borisov.

In regards to claim 1, Raizk discloses an apparatus for splitting a test piece, comprising: a base (38; Figure 3) with a centerline (an imaginary line disposed along the longitudinal axis of the dropping bar, 21); two pillars (32/33) disposed on the base (38) separated by a fixed first interval to support the test piece (35) at a first side (backside) thereof, wherein a connection line between the pillars (32/33) is perpendicular to and divided equally by the centerline; and a sliding piece (breaking tip, 23) disposed on the base (via vertical legs 11) at a second side (front side) of the test piece, which is opposite to the first side (backside) thereof, wherein the sliding piece is slidable along the center line (by pinion, 31 and corresponding teeth, 24);

Raizk discloses one finger, but does disclose that the sliding piece has two fingers parallel to the centerline separated by a second interval, which is smaller than the first interval, and that the connection line between the tips of the fingers is perpendicular to and divided equally by the centerline. However, attention is directed to the Borisov device that discloses stock braking machine with two symmetrical shoulders (2) equidistant from the stops. Borisov discloses that the use of the two shoulders improves the broken stock surface quality by eliminating compressive stress in the break zone. It similarly would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the Raizk device to have utilized two fingers (2) as taught by Borisov on the sliding member (23) instead of just the one to improve the broken test piece surface quality. Additionally, it is noted that although the combination of the Borisov and Raizk device would incorporate the shoulders on the moving member, instead of the non-moving member as taught by Borisov, one having

ordinary skill in the art would have recognized that providing the shoulders on the moving or non-moving member (i.e. reversing the four reaction points) would still provide an equal although opposite reaction (i.e. breaking) force on the center of the beam, that would still enable the device to perform the identical, equivalent splitting function. Additionally, it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 16 and that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

4. Claims 1, 4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansfield et al. (U.S. Patent 5,839,635), herein referred to as Mansfield. In regards to claims 1 and 7, Mansfield discloses an apparatus (Figures 2a/3a) for splitting a test piece (11) with a slit (formed by the blade 21/29), comprising: a base with a centerline (along the slotted groove in Figure 2A) for aligning with the slit of the test piece; two pillars (17/18) disposed on the base separated by a fixed first interval to support the test piece at a first side of the test piece, wherein a connection line between the pillars is perpendicular to and divided equally by the centerline (18 can be moved over). In a second embodiment (Figure 3A) Mansfield discloses a sliding piece (cleaving hammer 28) disposed on and in contact with the base at a second side of the test piece, which is opposite to the first side thereof, wherein the sliding piece is slidable on the base and has two fingers (see Figure 3B) parallel to the centerline separated by a second interval, which is smaller than the first interval, and a connection line between

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the tips of the fingers is perpendicular to and divided equally by the centerline, and the two fingers are arranged to contact the test piece at two sides of the slit when the sliding piece slides toward the test piece thereby splitting the test piece along the slit. In the first embodiment (Figure 2A) Mansfield discloses that in the art it is known to clamp an optical fiber (11) between two supports and to score the fiber utilizing a sliding piece (scoring wheel 21 attached to a moveable assembly) and a counter anvil 19. In the second embodiment (Figure 3A) Mansfield discloses again clamping the optical fiber between two supports and scoring the fiber with a cutting wheel. Mansfield also discloses a secondary action of moving a cleaving hammer (28) with two fingers (as best shown in Figure 3B) into engagement with the optical fiber on both sides of the scoring line to completely sever the optical fiber. In such an embodiment, Mansfield has created a four point beam shear with the sliding piece (hammer, 28) providing equal pressure against opposite sides of the score line which is also supported by the clamping means (17/18 and/or 24/26). Mansfield does not disclose the combination of having the sliding piece (hammer, 28) on a moving assembly in a track of the base as claimed, or as shown in the embodiment of Figure 2A. However, as the moving assembly has already been disclosed in Figure 2A, and as difference between Mansfield and the instant invention amounts to a rearrangement of known parts for performing the same function of creating a four point bending/shearing function it would have been obvious to one having ordinary skill in the art to have modified the Mansfield apparatus to provide the sliding piece (hammer, 28) slidable along the centerline of the base and/or within a guide track as shown in Figure 2A.

In regards to claim 4, the modified device of Mansfield discloses wherein the base (11) has a straight groove (28) along the centerline, and the sliding piece has a protrusion (see Figure 1) movable in the groove along the centerline. See reference to Curtis et al.; U.S. Patent 5,123,581 (col. 2, lines 33-55) for numbering correspondence.

In regards to claim 6, the modified device of Mansfield discloses wherein the base (11) has a straight groove (28) along the centerline, the sliding piece has a protrusion (see Figure 1) movable in the groove along the centerline, and the width of the protrusion substantially matches the width of the groove in the base, such that the sliding piece (27) is movable in the groove (28).

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansfield (U.S. Patent 5,123,581 further in view of Applicant's Admitted Prior Art.

Mansfield does not disclose the means by which pedestals, 12 and 14 are attached to the base 12. However, in the last office action, Official Notice was taken that it is old and well known in the art to use threaded connections as means of attachment.

Applicant failed to traverse the merits of this assertion, so the common knowledge is taken to be admitted prior art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide pivot points (threaded connections) to attach the pillars. It is noted that the previous rejection was made in regards to Curtis; however, as Mansfield also references the identical Curtis apparatus, the change to the rejection is in the name only.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAURA M. LEE whose telephone number is (571)272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura M Lee/
Examiner, Art Unit 3724
1/13/2009
/Boyer D. Ashley/
Supervisory Patent Examiner, Art Unit 3724